Revitalizing the Support Platoon

Gaining Flexibility With the Palletized Load System

by Captain Michael S. Flynn and Captain Jackson C. MacDonald

A LOGPAC Vignette

Your 1SG picks up your LOGPAC, consisting of the supply truck, two HEMTT cargos and two HEMTT fuelers, from the logistics release point (LRP) at 1800 hrs. The 1SG must return your LOGPAC slice to the LRP within two hours or face the support platoon leader's wrath. The clock is ticking. Due to your remote company location, your 1SG finally arrives at 1830 hrs. You now have effectively one hour to conduct LOGPAC operations. However the tactical situation only allows you to pull a section at a time off line to resupply. Of course, Murphy's Law still applies as you discover the PTO on a HEMTT fueler is out and you must transfer the fuel by gravity feed. This will more than double your refuel time. This refueling delay will cause a ripple effect, and you also will not be able to re-arm all of your tanks within the two-hour LOGPAC time window. Examine your options. Now, what do you do?

Miss the LRP return link-up time, which will require the 1SG to make the four-hour return trip to the field trains to escort your LOGPAC slice.

Download Class V honeycomb pallets and stop refueling at 1930 hrs in order to make the LRP link-up. You can then upload ammunition when you get time.

Request an LRP time extension — DENIED!! The support platoon must return to the BSA to meet its scheduled LRP with higher headquarters.

No option looks good. Does this situation sound familiar?

Current Limitations

The support platoon is the backbone of the armor battalion. Whether this platoon is organized within the BN/TF HHC or in the proposed forward support company (FSC) of the forward support battalion (FSB), the platoon's capability remains critical to the heavy task force's success. The current equipment and doctrinal employment of the support platoon have imposed restrictions and limitations on the supported maneuver units:

-Limited time available to conduct the LOGPAC at company level.

-Tactical situation may dictate last minute change to the LOGPAC schedule.

-Support platoon vehicles must be available for resupply from higher headquarters.

-HEMTT fueler inflexibility.

-HEMTT cargo trans-loading time.

These problems will be compounded with the advent of Force XXI and the three-company armor battalion. Force XXI will dramatically expand the area of operations (AO) of a heavy task force. Tank companies will operate in much larger sectors, with more dispersion between vehicles and personnel, further increasing the challenge of resupply. While the current MTOE and doctrinal employment are relatively effective, there is a need to review the support platoon in relation to developments in trucks and equipment technology.

Revitalized Support Platoon

To meet the more demanding resupply challenges, a support platoon based on the M1074 Palletized Load System (PLS) is the solution. By using the PLS with trailers and various flatrack systems, the PLS easily becomes a flexible multipurpose resupply vehicle.

The PLS is comprised of a 16.5-ton payload tactical truck equipped with a flatrack. The truck is a 5-axle, 10-wheel drive vehicle equipped with a 500-hp Detroit Diesel engine, Allison automatic transmission, and central tire inflation system. This combination provides a highly mobile system capable of transporting its payload in virtually any type of terrain, in any type of weather, and maintaining pace with the armor battalion it supports.[1]

The strength of the PLS lies in its ability to carry various flatracks. This allows one vehicle to perform several missions, unlike the current HEMTT Family of Vehicles. The standard sideless flatrack, M1077, is used to transport pallets of ammunition and other supplies. Another flatrack currently under evaluation is a 3000-gallon fuel tank and pump module.[2] This unit can conduct refuel operations while mounted on a PLS or after being downloaded, allowing the PLS truck simultaneously to conduct another mission.

The PLS truck can also pull the M1076 trailer. This trailer is a 3-axle, wagon style trailer with a 16.5-ton payload, and is equipped with a flatrack that is interchangeable between the truck and trailer. The combination of truck and trailer provides the combined payload capacity of 33 tons. The flatracks are lifted on and off the truck and trailer by a hydraulic powered arm mounted on the truck, eliminating the need for additional material-handling equipment.

The controls for the arm are located inside the cab, allowing the operator to load or unload the truck in less than one minute without leaving the cab.[3]

Additional Equipment - To aid in the rapid accomplishment of the support platoon mission, the PLS trucks would be equipped with a variety of equipment.

Equip each PLS truck with a Variable Reach Material Handling Crane capable of lifting 3,900 lbs at 12.1 m. This crane gives the support platoon the ability to easily build combat-configured loads as necessary without external material-handling support.

In Force XXI, maneuver units will operate in a widely dispersed AO. This will create the need to resupply companies with independent LOGPACs. These independent LOGPACs require communications equipment to successfully and safely accomplish their assigned missions, thus it is necessary to equip each PLS truck with SINCGARS radio.

Due to the dispersion, each PLS also requires a GPS and a GPS tracking system. This would assist the crew with navigation and the marking of downloaded flatrack locations. The GPS tracking system would enable the support platoon leader and platoon sergeant to accurately monitor and direct the position of logistics assets on the battlefield.

Revised MTOE

A PLS support platoon would be organized similar to the current support platoon MTOE with a platoon HQ, a headquarters squad, and three line company squads. The platoon HQ consists of identically equipped HMMWVs for the platoon leader and platoon sergeant. These HMMWVs would be equipped with applique, providing the platoon leadership greater ability to command and control their assets. The headquarters squad would consist of vehicles to support TF decon operations, Class III and V supply operations, miscellaneous cargo and troop transport, and the Class III/V vehicles located in the combat trains. Each line company Class III/V squad would support a corresponding maneuver company, thereby creating a habitual relationship between the squad leader and the supported company.

Personnel

The PLS support platoon would have some significant personnel changes. Regardless of whether the support platoon is organized in the BN/TF HHC or the FSC, the platoon leader must be an armor officer and the platoon sergeant an armor master sergeant. These combat arms leaders possess the necessary tactical experience to accurately anticipate the armor battalion's logistical requirements. An 88M40 would act as the operations sergeant (truckmaster), and provide technical transportation advice to the platoon leader and platoon sergeant. The ammunition NCO must be a 55B20. This position requires an extensive knowledge of ammunition operations and administration requirements. The train-up time for a 55B would be a fraction of the time required to fully train a soldier from another MOS. The remainder of the enlisted personnel in the platoon would be 88M and 77F. This would allow 19Ks to to continually train for their primary war fighting MOS, tanking!!

Fuel tank and pump unit.

Additional Platoon Equipment

There would be equipment changes in addition to the PLS.

The support platoon headquarters would consist of two HMMWVs. This would provide the necessary C2 and flexibility to operate in a much larger area.

Provide the ammunition NCO with a tactical forklift. This forklift would augment the FSB ammo section's forklift during operations at the Ammunition Transfer Point (ATP). This forklift would assist in building Class IV and V combat configured loads on flatracks at the field trains, while the PLS trucks are employed on other missions.

Doctrinal Employment

The adoption of Force XXI will create a need to revise the tactical employment of the support platoon. LOGPAC operations would remain similar to the current method with a few modifications.

The platoon sergeant and/or squad leaders could lead additional LOGPAC convoys, as maneuver companies will be widely dispersed.

If time is a constraint during the resupply at the company position, the PLS can drop flatracks of ammunition and fuel, giving the company commander flexibility to resupply at his convenience. The grids to these dropped flatracks would be recorded using the GPS. PLSs could then recover the single flatracks during the next LOGPAC, or PLSs from the combat trains could be used to consolidate the flatracks in one location for pickup at a more convenient time.

Prestocking ammunition and fuel becomes a quick and simple operation. Since the fuel flatrack is self-contained, the PLS truck and operator are not needed to pump fuel. This frees up the PLS truck to complete another mission.

Units normally maintain an emergency supply of Class III/V in the combat trains. Currently, support platoon trucks must transload supplies or swap vehicles and/or crews to maintain a full supply forward. With the ability of the PLS to rapidly exchange flatracks, it becomes a simple process to keep the same vehicles and crews fully supplied at the combat trains.

Currently the battalion counter-mine team is assigned to the support platoon. This team consists of four 5-ton tractors with four M172 lowboy trailers used to transport the battalion mine rollers and mine plows. By using the PLS flatracks, these breaching assets can be prepositioned where needed, eliminating the need for the 5-ton tractors/trailers and their crews.

If the FSB petroleum section is equipped with the PLS instead of the current 5,000-gallon fuel tanker, resupply with the battalion support platoon would be simple and effective. The FSB would exchange an empty fuel flatrack from the support platoon and issue a full flatrack, reducing the time these units are vulnerable to enemy action.

PLS Support Platoon Benefits

It becomes clear there are many benefits in using a PLS-equipped support platoon.

LOGPAC turnaround times are much quicker by dropping flatracks with the supported companies, allowing support platoon vehicles to continue with a simultaneous mission.

The supported company commander has greater flexibility to conduct resupply at the most tactically sound time by rearming and refueling from dropped or prepositioned flatracks at his convenience.

The ability of a PLS truck to carry removable flatracks creates flexibility to quickly perform multiple missions. The removable flatracks allow loads to be configured on dropped flatracks while the truck is conducting another mission.

The support platoon would have exceptional command and control because fewer vehicles would be on LOGPAC convoys, and all vehicles would have a radio and GPS.

Changing the MTOE would eliminate 11 vehicles and 13 soldiers from the current support platoon designed to support the new three-company armor battalion.

The use of all 77F and 88M enlisted soldiers eliminates the need to train 19Ks in alternative MOSs.

Revised Vignette

Your 1SG picks up your LOGPAC, consisting of the supply truck, an ammunition PLS with trailer, and a fuel PLS with trailer from the LRP at 1800 hrs. The 1SG must return your LOGPAC slice to the LRP within two hours or face the support platoon leader's wrath. The clock is ticking. Due to your remote company location, your 1SG finally arrives at 1830 hrs. You now have effectively one hour to conduct LOGPAC operations. However the tactical situation only allows you to pull a section at a time off line to resupply. Within ten minutes, the PLS trucks drop their flatracks, record the grids, and are ready for the return trip to the LRP. Your company will now complete resupply when the tactical situation is stable. The support platoon PLS trucks will return to pick up your empty flatrack on tomorrow's LOGPAC.

Notes

[1]*Heavy Tactical Wheeled Vehicles – PLS Program*, <www.tacom.army.mil/dsa/pm_htv/pls/pls_programs.html>, April 1998, page 1.

[2]*Heavy Tactical Wheeled Vehicles – PLS Mission Modules,* <www.tacom.army.mil/dsa/pm_htv/pls/pls_mission_modules_programs.html>, April 1998, page 2.

[3]*Heavy Tactical Wheeled Vehicles – PLS Program*, page 1.

CPT Michael S. Flynn enlisted in 1987 and served as a 19D before attending Illinois State University. He was commissioned in May 1994 and graduated from the Armor Officer Advance Course in May 1998. He served with 1-35 AR as a tank platoon leader, support platoon leader, and executive officer. He is currently assigned to 2nd ACR in Fort Polk, La.

CPT Jackson C. MacDonald enlisted in 1991 and served as an 11B before attending OCS. He was commissioned from OCS in 1994 and graduated from the Armor Officer Advance Course in May 1998. He has served with 1-33 AR as a tank platoon leader, assistant battalion S4, support platoon leader, and executive officer. He is currently assigned to HQ USAREUR in Heidelberg, Germany.

PROPOSED MTO&E

Platoon Headquarters

Command & Control

1LT 12B00 (PLT LDR)
PFC 88M10 (DVR)

Command & Control

MSG 19Z00 (PLT SGT)
PFC 88M10 (DVR)

Headquarters Squad

TF DECON

SPC 54B10 (DECON SPC)

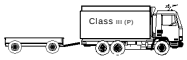
AMMUNITION SECTION

SSG 55B30 (AMMO NCO)
PFC 88M10 (VEH DVR)

MISC. TRANSPORTATION

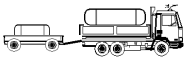
SSG 88M30 (OPNS NCO)
PFC 88M10 (VEH DVR)

CLASS III SECTION



SSG 77F30 (POL SUP)
PFC 77F10 (VEH DVR)

MOGAS

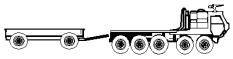


SGT 77F20 (POL VEH OPR)
PFC 77F10 (VEH DVR)

CTCP

SSG 88M30 (SEC SGT)
PFC 88M10 (ASST VEH DVR)

CTCP



SGT 88M20 (VEH DVR)
PFC 88M10 (ASST VEH DVR)

CTCP

SGT 77F20 (POL VEH OPR)
PFC 77F10 (VEH DVR)

CTCP

SGT 77F20 (POL VEH OPR)
PFC 77F10 (VEH DVR)

CTCP

SGT 77F20 (POL VEH OPR)
PFC 77F10 (VEH DVR)

3 Tank Company Class III / V Squads

A Company Squad

SSG 88M30 (SQD LDR)
SPC 88M10 (ASST VEH DVR)

SGT 88M20 (VEH DVR)
PFC 88M10 (ASST VEH DVR)

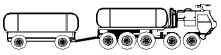
SGT 77F20 (POL VEH OPR)
SPC 77F10 (VEH DVR)

SGT 77F20 (POL VEH OPR)
PFC 77F10 (VEH DVR)

B Company Squad

SSG 88M30 (SQD LDR)
SPC 88M10 (ASST VEH DVR)

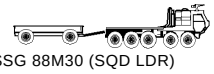
SGT 88M20 (VEH DVR)
PFC 88M10 (ASST VEH DVR)



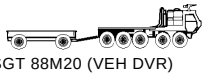
SGT 77F20 (POL VEH OPR)
SPC 77F10 (VEH DVR)

SGT 77F20 (POL VEH OPR)
PFC 77F10 (VEH DVR)

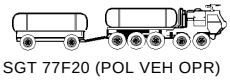
C Company Squad



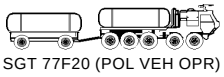
SSG 88M30 (SQD LDR)
SPC 88M10 (ASST VEH DVR)



SGT 88M20 (VEH DVR)
PFC 88M10 (ASST VEH DVR)



SGT 77F20 (POL VEH OPR)
PFC 77F10 (VEH DVR)



SGT 77F20 (POL VEH OPR)
PFC 77F10 (VEH DVR)